ENVIRONMENTAL AND COMMUNITY IMPACT STATEMENT
PROPOSED SUBDIVISION ROADWAY-ROAD A (#77 Elm Street)
NORTH READING, MASSACHUSETTS
(January 25, 2019)

INTRODUCTION

Section 350-13(x) of the North Reading Community Planning Commission's (CPC) Subdivision Rules & Regulations requires that an Environmental and Community Impact Statement ("Impact Statement") be prepared for any residential subdivision which creates frontage for four (4) or more dwelling units. The purpose of the "Impact Statement" is to clearly and methodically assess the relationship of the proposed development to the natural and man-made environment of North Reading. This "Impact Statement" has been prepared to address the potential impacts of the proposed construction of the residential subdivision to be known as the Road A Subdivision at #77 Elm Street (Assessors Map 78, Lots 79 & 89).

(A) NATURAL ENVIRONMENT

1) Air & Noise Pollution – There will be no measurable impact related to air and noise pollution associated with the seven (7) proposed single family homes. The CPC and Town Departments have extensive experience with residential subdivisions of all sizes. The Road A Subdivision at #77 Elm Street is a small project that will be constructed over the course of approximately 24 to 36 months. During construction, some heavy equipment will create noise during the construction of the roadway and its infrastructure. The noise pollution during construction will be mitigated by limiting construction to reasonable hours during weekdays and weekend days. The developer expects that the CPC will condition the approval of this subdivision with reasonable limits on work times during construction. Air pollution during construction may include the creation of dust during earth moving operations. The developer will use dust control measures as needed during construction to limit the migration of dust.

2) Water Pollution – The project is being designed in accordance with the Department of Environmental Protection's (DEP's) Stormwater Management Regulations and Standards. Each of the ten (10) DEP Stormwater Management Standards are being met with the proposed design. The presumption in DEP's regulations and guidance documents is that if a project complies with the 10 standards that it is protecting the interests of the Wetland Protection Act and its regulations. Therefore, each of the topics described in the water pollution section have been evaluated and addressed as part of compliance with DEP's 10 standards.

3) Land – The on-site soils are very compatible with the proposed development. Soil testing has been conducted throughout the proposed development area by a DEP Approved Soil Evaluator to identify the texture of the on-site soils, determine the estimated seasonal high groundwater table, and perform percolation tests. Thirty-eight (38) deep holes were excavated within the proposed approximate 7.8 acres that the development will encompass. The texture of the parent material soil is predominantly loamy sand (30 of the 38 holes), which is considered very permeable. Eight of the holes yielded a soil texture of sandy loam, which is still considered a permeable soil. The percolation test data is also consistent with permeable soils. The on-site soils are suitable to support septic systems and the proposed

infiltration best management practices (BMPs) proposed for the stormwater management system.

4) Plants and Wildlife – Approximately 90 percent of the 7.8 acres being developed is wooded. About 70 percent of trees will be cut down resulting in some loss of vegetation and habitat for wildlife. None of the subject property lies within habitat of any rare and endangered plant or animal species.

5) Water Supply – Four (4) bedroom homes are proposed for the six (6) new single family homes. The total number of new bedrooms in the proposed project is equal to twenty four (24). The estimated water consumption for the project is based on 110 gallons per bedroom per day, which is the design flow rate listed for Family Dwelling, Single in 310 CMR 15.203 (The State Sanitary Code, Title 5). Therefore, the estimated water consumption for the project is equal to 24 bedrooms times 110 gallons per bedroom per day, which is equal to approximately 2,640 gallons per day. The Town's drinking water supply comes from four (4) well fields within the Town of North Reading. The six (6) new homes will have a negligible impact on this groundwater drinking water supply.

6) Sewage Disposal - Similarly, the estimated sewage disposal is based on the same calculation. That is, the estimated sewage disposal for the project is equal to 24 bedrooms times 110 gallons per bedroom per day, which is equal to approximately 2,640 gallons per day. Subsurface sewage disposal systems will serve each of the new homes. The septic systems will be designed in accordance with Title 5, The State Environmental Code (310 CMR 15.000). The one existing septic system will be removed and replaced with a new system. The septic systems allow water that has been consumed in the home to discharge back into the ground. This water helps recharge the groundwater under the site. The expected flows will have no measurable impact on the groundwater under the site.

(B) MAN-MADE ENVIRONMENT

1) Existing Neighborhood Land Use - #77 Elm Street contains one existing single family home, which will be razed as part of the project. This property is located in a residential neighborhood consisting of other single family homes, which is compatible with the proposed subdivision.

2) Zoning – The subject property is located within the Residence A (RA) Zoning District. According to the Zoning Bylaw, residence districts are so designated to provide satisfactory areas for persons to reside, away from the unhealthy aspects of commercial development. The proposed Eaton Street Subdivision is consistent with the purpose of the Zoning Bylaw.

(C) PUBLIC SERVICES

1) Schools – Since 2008, the Town of North Reading has seen a steady decline in student enrollment. In 2008, approximately 2,800 students were enrolled in the system. That number declined to approximately 2,500 in 2015. According to US Census information for the year 2000, approximately 40 percent of households in North Reading have school-aged children and the average family size was 3.28 with 27.5 percent of people under the age of 18. Using these numbers, it is reasonable to estimate that approximately 2.17 school aged

children will be associated with the 6 new homes. This development will have a negligible impact on the School District. School Bus Routes for the local grade school, middle school, and high school have pickup locations at 72 Elm Street, which is very close to the proposed roadway, which is accessible via the existing sidewalk on Elm Street.

2) Police – The North Reading Police Department regularly patrols this neighborhood and we believe that no additional man power will be needed to protect the proposed development. A stop sign and street sign are shown on the subdivision plan set (see plan and profile sheet).

3) Fire - The North Reading Fire Station (152 Park Street) is located approximately 2.1 miles from the proposed roadway. Emergency vehicles can access the proposed roadway from Park Street to Elm Street. The geometry of the proposed roadway allows for safe turning movements in and out of the proposed Road A. Two (2) new fire hydrants are proposed, one at the end of the cul-de-sac and a one near the intersection with Elm Street.

4) Recreation – There are no formal on-site recreation areas proposed as part of the project. No public open space is proposed. As a dead-end street with a cul-de-sac, children often ride their bicycles with less worry about through traffic. Street hockey, Wiffle ball, and basketball are also popular choices today for playing on dead end streets. Abutting the subject property is the Thomson Country Club, a private 18 hole golf course with annual memberships available.

5) Solid Waste Disposal – According to the latest US EPA data (2013), the average person generates approximately 4.40 pounds of municipal solid waste (MSW) per person per day. Approximately, 34.3 percent of this MSW is recycled today. Residents in the Town of North Reading pay approximately $226 per household per year for curbside pickup of MSW. The proposed Road A subdivision will fit right in with this existing program. MSW collection vehicles current drive right by #77 Elm Street and will easily turn down the new road to collect MSW and recycling from the new residents as part of their regular pick up schedule for this neighborhood.

6) Traffic – Six (6) additional single family homes will do very little to adversely affect the existing traffic patterns, Level of Service (LOS), or volumes along Elm Street. According to Institute of Transportation Engineers (ITE) Trip Generation Manual (9th Edition), the proposed project will generate approximately 57 additional average vehicle trip ends on a weekday. The estimated morning (or am – between 7:00 am and 9:00 am) peak traffic volume for the new roadway is approximately 3.4 trips exiting and 1.3 trips entering. Similarly, the estimated evening (or pm – between 4:00 pm and 6:00 pm) peak traffic volume for the new roadway is approximately 2.2 trips exiting and 3.8 trips entering.

7) Highway – The proposed Road A Subdivision roadway is an approximately 600-foot long roadway that will involve the use of some heavy equipment to cut and clear trees, remove and stockpile topsoil, rough grade the limits of the roadway, install water lines and the stormwater management system, finish grade the roadway and then pave the roadway. It is a relatively small project will little impact to Elm Street during construction.

(D) AESTHETICS

1) Lighting – Electric utility design and layout and street light locations are typically determined by the Reading Municipal Light Department (RMLD). Street lights shall be installed to conform to the type and style as required by the Department of Public Works. A note (see note #8) to this effect is included on Sheet 4 of 8 of the subdivision plan set.

2) Landscaping – Street trees are proposed in accordance with the subdivision regulations. Disturbed earth is to be stabilized with loam and grass seed in accordance with our erosion and sediment control plan, which will be submitted to the North Reading Conservation Commission as part of our Notice of Intent (NOI) permit application. This information will also be included with the Stormwater Pollution Prevention Plan (SWPPP) which will be submitted to the Town Engineer prior to construction.

3) Visual – Careful thought and consideration were given to the proposed grading program to provide for aesthetically pleasing grades after the project is completed. The developer also plans to institute a restrictive covenant on the project, which will help protect views to and from adjacent properties.

(E) PLANNING

1) Compatibility – The Town is currently working on updating their Master Plan with the help of the Metropolitan Area Planning Council (MAPC). The new discussion points for "Housing Options" in the Master Plan update include the following questions:

   a) Senior/ Aging-in-Place Options?

   b) Affordable Workforce Options?

   c) Clustered Open Space Subdivisions?

   d) Accessory Dwelling Units?

   e) Small Lot Single Dwellings?

   f) Increasing Two-Family Duplexes?

   g) Creating pocket Neighborhoods?

   h) The possibility of Townhouse/ Multifamily?

   i) Mixed-Use?

   j) Construction of "Tiny Houses?"

   The previous Master Plan was dated June 2004. The housing recommendations in this report tell us that the Town sought to develop a good mix of housing that serves all segments of the population and placing an emphasis on affordable housing. The previous report stated that

future housing should consist of small single-family homes and duplexes, condominiums, and senior housing along with larger single-family homes.

The Town recently created a housing production plan to help address issues surrounding affordable housing in North Reading. The report talks about population projections from the MACP that

> "…suggest the need for housing alternatives to accommodate the increasing population of seniors and their lifestyle changes such as more handicapped accessibility, smaller units, housing with supportive services, more in-home support and social connections and units without substantial maintenance demands. Additionally, more affordable starter housing opportunities to attract young adults, including young families, should be promoted to reduce significant losses of this segment of the population that adds so much vitality to the community."

The subject property lies within the RA Zoning District, which requires a minimum lot area of 40,000 SF. This minimum area requirement lends itself to larger single-family homes, which is what is proposed for the project.

The latest Open Space and Recreation Plan is dated March 2013. The subject property is a small-scale residential development and does not have enough usable open space to propose an open space component to the Town. The subject property does abut the Thomson Country Club, but this is a private property.

(F) TRAFFIC IMPACTS

1. Existing Level of Service (LOS) – Based on the number of vehicles the proposed project will generate, the six (6) additional single family homes will do very little to adversely affect the existing traffic patterns, Level of Service (LOS), or volumes in this neighborhood.

2. Change in Relevant Roadway Systems – Based on the number of vehicles the proposed project will generate, we do not believe there will be any measurable change in the condition of relevant road systems as a result of the proposed development.

3. Total Vehicular Traffic Generation – Six (6) additional single family homes will do very little to adversely affect the existing traffic patterns, Level of Service (LOS), or volumes in this neighborhood. We believe that evaluating existing LOS and predicting what increase in traffic volume would be expected to produce a LOS below C are not warranted for this project.

(G) COST/ BENEFIT ANALYSIS

1. For the cost/benefit analysis, we present the following information for the CPCs consideration. Information regarding the Town of North Reading was taken from the 2017 Annual Report, unless otherwise noted.

a. The current population of the Town of North Reading is approximately 15,173 persons.

b. According to the 2000 census, the average household size in the Town of North Reading was 2.86. Using this data, the expected number of persons living in the 6 proposed single family homes on proposed Road A will be approximately 17.16.

c. The total Town Expenditures for Fiscal Year Ended June 30, 2017 was $78,881,780.

d. The annual per-capita expenditure for the period described in item c. is approximately $5,199.

e. The total Town Revenue for Fiscal Year Ended June 30, 2017 was $76,502,623.

f. The annual per-capita revenue for the period described in item e. is approximately $5,042.

g. The current tax rate (FY 2018) for residential property is $16.34 per thousand dollar valuation.

h. The average assessed value (FY 2019) of each of the six (6) homes with a Cobblers Lane address is approximately $775,400. This average value yields approximately $12,670 in annual revenue using the current tax rate. The total annual revenue for the six (6) Cobbler Lane homes is approximately $76,022. The 6 new homes on proposed Road A are expected to generate a similar annual revenue.

i. The six (6) proposed single family homes on proposed Road A will generate new home permit fees income for the Town equal to approximately $154,500.

j. New home owners in the neighborhood will also patronize local businesses and will add to the pool of potential volunteers in the community.